# International Migration and Identity Formation: The Perception of the Self and Others

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**PRIMARY OUTCOMES**

We aim to identify the direct effects on applicants and the spillover effects on non-applicants who remain in Uganda. Depending on the outcome, non-applicants include applicants' parents, siblings, and friends. We pool different groups of non-applicants and consider them in a joint sample when estimating spillover effects. Here is an overview of the primary outcomes for applicants and non-applicants:

1) Universalism: Applicants and non-applicants (parents, siblings, and friends)
2) Gender attitudes: Applicants and non-applicants (parents, siblings, and friends)
3) Black identity: Applicants and non-applicants (siblings and friends)

We describe the details of our primary outcomes below. We mark primary outcomes with a number sign (#). For primary outcomes based on an aggregate outcome, we will also report treatment effects on the individual components (but our focus remains on the aggregate outcome).

Universalism
- Unweighted average of domestic, foreign, and global universalism (building on Enke et al., Moral Universalism: Measurement and Economic Relevance, Management Science, 2022, and Cappelen et al., Universalism: Global Evidence, American Economic Review 2025) #
  - Domestic universalism: Measured through third-party dictator games over the allocation of 100 coins between a domestic member of the respondent's ingroup and a domestic stranger. Domestic universalism corresponds to the average number of coins given to the domestic stranger in the following money allocation decisions:
    - A member of your extended family vs. a random stranger from Uganda
    - A stranger from your ethnic group in Uganda vs. a stranger from a different ethnic group in Uganda
  - Foreign universalism: Measured through third-party dictator games over the allocation of 100 coins between a domestic stranger and a foreign stranger. Foreign universalism corresponds to the average number of coins given to the foreign stranger in the following money allocation decisions:
    - A random stranger from Uganda vs. a random stranger from Germany
    - A random stranger from Uganda vs. a random stranger from Indonesia
  - Global universalism: Measured through a third-party dictator game over the allocation of 100 coins between a foreign member of the respondent's ingroup

and a foreign stranger. Global universalism corresponds to the number of coins given to the foreign stranger in the following money allocation decision:

- A stranger from Indonesia who shares your religion vs. a stranger from Indonesia who follows a different religion
- We will analyze this outcome for applicants and non-applicants. Non-applicants include parents, siblings, and friends.

## Gender attitudes

- Overall index, combining reaction times in the Harvard Gender-Career Implicit Association Test, the average number of coins given to a female stranger in third-party dictator games, and the index of views on gender roles defined below #
  - Reaction times in the Harvard Gender-Career Implicit Association Test from Project Implicit
  - Average number of coins given to a female stranger in third-party dictator games over the allocation of 100 coins between a male and a female stranger in the following money allocation decisions:
    - A male stranger from Uganda vs. a female stranger from Uganda
    - A male stranger from Germany vs. a female stranger from Germany
    - A male stranger from Indonesia vs. a female stranger from Indonesia
    - A male stranger from the United States vs. a female stranger from the United States
  - Index of views on gender roles, based on the following items
    - Being a housewife is just as fulfilling as working for pay. (reverse-scored)
    - When jobs are scarce, men should have more right to a job than women. (reverse-scored)
    - On the whole, men make better political leaders than women do. (reverse-scored)
    - A university education is more important for a boy than for a girl. (reverse-scored)
    - On the whole, men make better business executives than women do. (reverse-scored)
    - A woman should tolerate violence in order to keep her family together. (reverse-scored)
    - A man should have the final word about decisions in the family home. (reverse-scored)
- We will analyze this outcome for applicants and non-applicants. Non-applicants include parents, siblings, and friends.

## Black identity

- Overall index, combining the dummy for making references to Black identity, the average number of coins given to a Black stranger in standard dictator games, the average number of coins given to a Black stranger in third-party dictator games, trust in Black people, the Oneness scale with respect to Black people, and the Feeling Black index defined below #

- Dummy for making references to Black identity in a shortened variant of the Twenty Statements Test by Kuhn and McPartland (Twenty Statements Test, American Sociological Review, 1954)
  - There are 15 numbered blanks on the page below. Please write 15 answers to the simple question "Who am I?" in the blanks. Just give 15 different answers to this question. Answer as if you were giving the answers to yourself, not to somebody else. Write the answers in the order that they occur to you. Don't worry about logic or "importance." Go along fairly fast for time is limited to five minutes.
  - References to Black identity will, for example, include terms such as "Black," "brown," "dark-skinned," "non-white," "melanated," "colored," "color," "person/people of color," "African," "Africa," "Afro," "sub-Saharan," "race," or "racial"
- Average number of coins given to a Black stranger from the United States in standard dictator games over the allocation of 100 coins (expressed as the absolute difference from separate dictator-game allocations to two outgroups to control for the income effects of migration):
  - Coins given to a Black stranger from the United States minus coins given to a White stranger from the United States
  - Coins given to a Black stranger from the United States minus coins given to a random stranger from Indonesia
- Average number of coins given to a Black stranger from the United States in third-party dictator games over the allocation of 100 coins between a Black stranger from the United States and a foreign stranger in the following money allocation decisions:
  - A Black stranger from the United States vs. a White stranger from the United States
  - A Black stranger from the United States vs. a random stranger from Indonesia
- Average trust in Black people from the United States (expressed as the absolute difference in trust relative to two outgroups)
  - I'd like to ask how much you trust people from various groups. Could you tell me for each whether you trust people from this group completely, somewhat, not very much, or not at all?
    - Trust in Black people from the United States minus trust in White people from the United States
    - Trust in Black people from the United States minus trust in people from Indonesia
- Oneness scale with respect to Black people from the United States: unweighted average of the Inclusion of Other in the Self (IOS) scale and the We scale defined below
  - Average IOS scale with respect to Black people from the United States (expressed as the absolute difference in IOS scale relative to two outgroups)

- Please look at the figures below. Which figure best represents your connection with each of the following groups of people?
  - IOS scale for Black people from the United States minus IOS scale for White people from the United States
  - IOS scale for Black people from the United States minus IOS scale for people from Indonesia
- Average We scale with respect to Black people from the United States (expressed as the absolute difference in We scale relative to two outgroups)
  - Please select the appropriate number below to indicate to what extent you would use the term "We" to characterize you and each of the following groups of people?
    - We scale for Black people from the United States minus We scale for White people from the United States
    - We scale for Black people from the United States minus We scale for people from Indonesia
- Feeling Black index, based on the following items
  - Overall, being Black has very little to do with how I feel about myself. (reverse-scored)
  - In general, being Black is an important part of my self-image.
  - My destiny is tied to the destiny of other Black people.
  - I have a strong sense of belonging to Black people.
  - Being Black is an important reflection of who I am.
  - Being Black is not a major factor in my social relationships. (reverse-scored)
  - How important are each of these characteristics to how you think about yourself?
    - Your racial background
    - Africa
- We will analyze this outcome for applicants and non-applicants. Non-applicants include siblings and friends.
- In additional secondary analysis, we will use the survey items relating to the Feeling Black index to prime Black identity. We will randomize the order of the respective survey items to assess the differential performance of primed respondents in an incentivized digit-matching correspondence task. Half of the respondents will answer the respective survey items before conducting the digit-matching correspondence task (primed), while the other half will conduct the digit-matching correspondence task before answering the survey items (not primed). We will interact the treatment dummy with a dummy for being primed to test for differential priming effects in the treatment group.

## SECONDARY OUTCOMES

As before, we distinguish between applicants and non-applicants (applicants' parents, siblings, and friends). Here is an overview of the secondary outcomes for applicants and non-applicants:

1) Studying at university and residing abroad: Applicants
2) Social distance: Applicants and non-applicants (parents, siblings, and friends)
3) Social networks: Applicants and non-applicants (siblings and friends)
4) Local attachment to Uganda: Applicants and non-applicants (siblings and friends)
5) Self-description in the Who-Am-I task: Applicants and non-applicants (siblings and friends)
6) Personality traits: Applicants and non-applicants (siblings and friends)
7) Religiosity: Applicants and non-applicants (parents, siblings, and friends)
8) Zero-sum thinking: Applicants and non-applicants (parents, siblings, and friends)
9) Agency: Applicants and non-applicants (parents, siblings, and friends)
10) Tolerance: Applicants and non-applicants (parents, siblings, and friends)
11) Pro-democratic attitudes: Applicants and non-applicants (parents, siblings, and friends)
12) Income: Applicants and non-applicants (parents)
13) Subjective wellbeing and mental health: Applicants and non-applicants (parents, siblings, and friends)
14) Worries: Applicants and non-applicants (parents, siblings, and friends)
15) Discrimination, sexual harassment, and safety: Applicants

We describe the details of our secondary outcomes, which include mechanisms, below. We mark secondary outcomes with a plus sign (+). For secondary outcomes based on an index or a sum, we will also report treatment effects on the individual components (but our focus remains on the aggregate outcome).

## Studying at university and residing abroad (first stage)
- Dummy for studying at university in Germany +
- Dummy for studying at university +
- Dummy for residing abroad +
- We will analyze these outcomes for applicants.

## Social distance
- Overall index, combining the trust measure and the oneness scale defined below +
  - Trust measure
    - I'd like to ask how much you trust people from various groups. Could you tell me for each whether you trust people from this group completely, somewhat, not very much, or not at all?
  - Oneness scale, unweighted average of the Inclusion of Other in the Self (IOS) scale and the We scale defined below
    - IOS scale
      - Please look at the figures below. Which figure best represents your connection with each of the following groups of people?
    - We scale

- Please select the appropriate number below to indicate to what extent you would use the term "We" to characterize you and each of the following groups of people?
  - We will analyze this outcome separately for the following groups of people
    - People from your family
    - People from your ethnic group in Uganda
    - People from a different ethnic group in Uganda
    - People from Uganda in general
    - People from Germany
    - People from Indonesia
    - Black people from the United States
    - White people from the United States
- We will analyze this outcome for applicants and non-applicants. Non-applicants include parents, siblings, and friends.
- As a complementary outcome, we will also analyze the radius of trust. Building on Delhey et al. (How General Is Trust in "Most People"? Solving the Radius of Trust Problem, American Sociological Review, 2011), we define the radius of trust as the difference between average trust in ingroups and average trust in outgroups. We define ingroups as people from your family and your ethnic group in Uganda, and outgroups as people from a different ethnic group in Uganda, people from Indonesia, and White people from the United States.

## Social networks
- Size of social networks index, based on the following items +
  - How many people do you have contact with on a typical weekday?
  - How many close friends do you have?
  - Are you in a serious / permanent relationship?
- Diversity of social networks index, based on the following items +
  - What proportion of your friends are of a similar age as you? (reverse-scored)
  - What proportion of your friends are of the same ethnic tribe as you? (reverse-scored)
  - What proportion of your friends are of the same gender as you? (reverse-scored)
  - What proportion of your friends have a similar level of education as you? (reverse-scored)
  - What proportion of your friends are from Uganda? (reverse-scored)
  - What proportion of your friends are family members? (reverse-scored)
  - What proportion of your friends know one another? (reverse-scored)
- Quality of social networks index, based on the following items +
  - If you were in trouble, how often could you count on people in your life, like relatives or friends, to help you whenever you need them?
  - My relationships are as satisfying as I would want them to be.
- Index of involvement in social clubs or organizations, based on the following items +
  - Are you actively involved in a …
    - Religious community or club

- - - ■ Sports team or club
      - ■ Art, music, or other recreational club or organization
      - ■ Political organization
  - ● We will analyze these outcomes for applicants and non-applicants. Non-applicants include siblings and friends.

## Local attachment to Uganda

- ● Index of local attachment to Uganda, based on the following items +
  - ○ How important are each of these characteristics to how you think about yourself?
    - ■ Your family
    - ■ Your ancestry
    - ■ Your ethnic group
    - ■ The country you were born
    - ■ The location where you grew up
  - ○ For each of the following, please indicate how important it is in your life
    - ■ Family
  - ○ How proud are you to be Ugandan?
  - ○ How proud are you to be a member of your ethnic tribe?
  - ○ Where do you want to live when you are 35 years old? (dummy for Uganda)
  - ○ Dummy for making reference to Uganda, one's family, or one's ethnicity in a shortened variant of the Twenty Statements Test by Kuhn and McPartland (Twenty Statements Test, American Sociological Review, 1954)
    - ■ There are 15 numbered blanks on the page below. Please write 15 answers to the simple question "Who am I?" in the blanks. Just give 15 different answers to this question. Answer as if you were giving the answers to yourself, not to somebody else. Write the answers in the order that they occur to you. Don't worry about logic or "importance." Go along fairly fast for time is limited to five minutes.
- ● We will analyze this outcome for applicants and non-applicants. Non-applicants include siblings and friends.

## Self-description

- ● Analysis of the responses in the shortened variant of the Twenty Statements Test by Kuhn and McPartland (Twenty Statements Test, American Sociological Review, 1954)
  - ○ There are 15 numbered blanks on the page below. Please write 15 answers to the simple question "Who am I?" in the blanks. Just give 15 different answers to this question. Answer as if you were giving the answers to yourself, not to somebody else. Write the answers in the order that they occur to you. Don't worry about logic or "importance." Go along fairly fast for time is limited to five minutes.
    - ■ Percentage of responses relating to roles and relationships +
    - ■ Percentage of responses relating to personal attributes, abilities, achievements, and aspirations +

- - - We will also use state-of-the-art methods to (i) identify person-type clusters, (ii) quantify the multidimensionality of each respondent's self-description, and (iii) extract lexical features and sentiment. +
  - We will analyze this outcome for applicants and non-applicants. Non-applicants include siblings and friends.

## Personality traits

- Big-5 personality traits +
  - Our measures are based on the 10-item version proposed by Rammstedt and John (2007). How well do the following statements describe your personality? I see myself as someone who …
    - 1… is reserved
    - 2… is generally trusting
    - 3… tends to be lazy
    - 4… is relaxed, handles stress well
    - 5… has few artistic interests
    - 6… is outgoing, sociable
    - 7… tends to find fault with others
    - 8… does a thorough job
    - 9… gets nervous easily
    - 10… has an active imagination
  - Extraversion: 1 (reverse-scored) and 6
  - Agreeableness: 2 and 7 (reverse-scored)
  - Conscientiousness: 3 (reverse-scored) and 8
  - Neuroticism: 4 (reverse-scored) and 9
  - Openness: 5 (reverse-scored) and 10
- We will analyze these outcomes for applicants and non-applicants. Non-applicants include siblings and friends.

## Religiosity

- Religiosity index, based on the following items +
  - Apart from weddings and funerals, how often do you pray?
  - Apart from weddings and funerals, about how often do you attend religious services these days?
  - Are you actively involved in a religious community or club?
  - How important is God in your life?
  - How important are each of these characteristics to how you think about yourself?
    - Your religion
  - For each of the following, please indicate how important it is in your life
    - Religion
  - Dummy for making references to religion, religiosity, faith, or God in a shortened variant of the Twenty Statements Test by Kuhn and McPartland (Twenty Statements Test, American Sociological Review, 1954)

- - ■ There are 15 numbered blanks on the page below. Please write 15 answers to the simple question "Who am I?" in the blanks. Just give 15 different answers to this question. Answer as if you were giving the answers to yourself, not to somebody else. Write the answers in the order that they occur to you. Don't worry about logic or "importance." Go along fairly fast for time is limited to five minutes. (this item is not available for parents)
  - We will analyze these outcomes for applicants and non-applicants. Non-applicants include parents, siblings, and friends.

## Zero-sum thinking

- Index of zero-sum thinking, based on respondents' agreement with the first of two contrasting statements (building on Bergeron et al., Zero-Sum Environments, the Evolution of Effort-Suppressing Beliefs, and Economic Development, 2024) +
  - Statement 1: People only make money when others lose money.
    Statement 2: No one needs to lose money for others to make money.
  - Statement 1: Businesses only make money when others lose money.
    Statement 2: No one needs to lose money for businesses to make money.
  - Statement 1: If one person gets very wealthy, other people will become poorer.
    Statement 2: If one person gets very wealthy, other people will not necessarily become poorer.
  - Statement 1: In trade, if one party gains, the other party loses.
    Statement 2: In trade, it is possible for both parties to gain at the same time.
  - Statement 1: A person can only gain power by taking it away from others.
    Statement 2: A person can gain power without taking it away from others.
  - Statement 1: Gaining happiness requires taking it away from others.
    Statement 2: It is possible for everyone to be happy.
- We will analyze this outcome for applicants and non-applicants. Non-applicants include parents, siblings, and friends.

## Agency

- Agency index, based on the following items +
  - Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale where 1 means "no choice at all" and 10 means "a great deal of choice" to indicate how much freedom of choice and control you feel you have over the way your life turns out.
  - How well an individual succeeds economically in life can depend both on things that are within a person's control, such as personal effort, and on things that are not within a person's control, such as luck. Would you say that fit is mostly luck or effort that matters for how well an individual does economically in life?
- We will analyze these outcomes for applicants and non-applicants. Non-applicants include parents, siblings, and friends.

Tolerance
- Tolerance index, based on the following items +
    - For each of the following types of people, please tell me whether you would like having people from this group as neighbors in Uganda, dislike it, or not care:
        - People of different religion as neighbors in Uganda
        - People from other ethnic groups as neighbors in Uganda
        - Homosexuals as neighbors in Uganda
        - Immigrants or foreign workers as neighbors in Uganda
        - People who support a different political party as neighbors in Uganda
- We will analyze these outcomes for applicants and non-applicants. Non-applicants include parents, siblings, and friends.

Pro-democratic attitudes
- Index of views on democracy and corruption, based on the following items +
    - How important is it for you to live in a country that is governed democratically?
    - Which of these three statements is closest to your own opinion? (dummy for "Democracy is preferable to any other kind of government.")
    - How would you place your views on corruption using a scale from 1 to 10 where "1" means "corruption is not acceptable at all" and "10" means "corruption is totally acceptable". (reverse-scored)
- We will analyze these outcomes for applicants and non-applicants. Non-applicants include parents, siblings, and friends.

Income
- Sum of all income from the past three months, based on all income sources listed below, converted to real monthly net income and adjusted for purchasing power parity (PPP) +
    - Income from employment, including the monetary value of in-kind payments
    - Business and agricultural income from self-employment, including the value of self-produced food items consumed by the household
    - Remittances income, including the monetary value of in-kind remittances
    - Other transfers received from outside the household, including the monetary value of in-kind transfers
- We will analyze this outcome for applicants and non-applicants. For applicants, we will analyze their individual incomes. For non-applicants, we will analyze parents' per-capita household incomes.
- As a complementary outcome, we will also analyze labor market outcomes (e.g., employment status, earned income).

Subjective wellbeing and mental health
- Overall index, combining the subjective wellbeing index and the PHQ-8 defined below +
    - Subjective wellbeing index, based on the following items
        - Taking all things together, how happy would you say you are?
        - All things considered, how satisfied are you with your life as a whole these days on a scale of 1 to 10?

- ■ Overall, how angry did you feel yesterday? (reverse-scored)
- ■ Overall, how worried did you feel yesterday? (reverse-scored)
- ■ Overall, how happy did you feel yesterday?
- ■ Overall, how sad did you feel yesterday? (reverse-scored)
- ■ Overall, how lonely did you feel yesterday? (reverse-scored)
  - ○ PHQ-8
    - ■ Sum of the following items: Over the last 2 weeks, how often have you been bothered by any of the following problems? (reverse-scored)
      - ● Little interest or pleasure in doing things
      - ● Feeling down, depressed, or hopeless
      - ● Trouble falling or staying asleep, or sleeping too much
      - ● Feeling tired or having little energy
      - ● Poor appetite or overeating
      - ● Feeling bad about yourself, or that you are a failure, or have let yourself or your family down
      - ● Trouble concentrating on things, such as reading the newspaper or watching television
      - ● Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual.
- ● We will analyze this outcome for applicants and non-applicants. Non-applicants include parents, siblings, and friends.

Worries
- ● Sum of the following items: How much have you worried about this in the past three months?, based on all types of worries listed below +
  - ○ Not enough money for basic needs and living expenses (food, clothing, medical expenses, etc.)
  - ○ Housing
  - ○ Safety
  - ○ Not being able to educate all children (parents only)
  - ○ Difficulty finding work
  - ○ Debts owed to others
  - ○ Health problems, illness
  - ○ Facing racial, ethnic, or gender-based discrimination yourself
  - ○ Other family members facing racial, ethnic, or gender-based discrimination
  - ○ Feeling lonely yourself
  - ○ Other family members feeling lonely
  - ○ Experiencing sexual harassment yourself
  - ○ Family members experiencing sexual harassment
- ● We will analyze this outcome for applicants and non-applicants. Non-applicants include parents, siblings, and friends.

Discrimination, sexual harassment, and safety
- Overall index, combining the measure of discrimination, the measure of sexual harassment, and the safety index defined below +
  - Sum of the following items measuring discrimination: How many times in the past 3 months have you been discriminated against in each of the following ways because of such things as your race, ethnicity, gender, age, religion, physical appearance, sexual orientation, or other characteristics?
    - You are treated with less courtesy than other people.
    - You are treated with less respect than other people.
    - You receive poorer service than other people at restaurants or stores.
    - People act as if they think you are not smart.
    - People act as if they are afraid of you.
    - People act as if they think you are dishonest.
    - People act as if they think you are not as good as they are.
    - You are called names or insulted.
    - You are threatened or harassed.
  - Sum of the following items measuring sexual harassment: In the past 3 months, have you ever been in a situation where any individual(s)… (reverse-scored)
    - …made crude and offensive sexual remarks, either publicly (e.g., in the office), or to you privately?
    - …used, or distributed sexist or suggestive materials (e.g., pictures, stories, or pornography)?
    - …"put you down" or was condescending to you because of your sex?
    - ...touched you (e.g., laid a hand on your bare arm, put an arm around your shoulders) in a way that made you feel uncomfortable?
    - ...attempted to establish a romantic relationship with you despite your efforts to discourage this person?
    - ...made you afraid you would be treated poorly if you didn't cooperate sexually?
    - …made you feel like you were being subtly bribed with some sort of reward or special treatment to engage in sexual behavior?
  - Safety index, based on the following items
    - To what extent do you agree with the following statement: I feel safe walking home at night in my neighborhood or city
    - In the past 3 months, has anyone hit, slapped, kicked, or done anything else to hurt you physically? (dummy for "No")
- We will analyze this outcome for applicants.